"To care for him who shall have borne the battle and for his widow and his orphan."

Abraham Lincoln,
Second Inaugural Address

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Root Cause Analysis

VA National Center for Patient Safety

Root Cause Analysis (RCA)

Improving Patient Safety Through the RCA Process

Conducting an RCA is a critical aspect in the process of improving patient safety. Multidisciplinary RCA teams investigate matters ranging from medication errors to suicides to wrong site surgeries.

The goal of the RCA process is to find out what happened, why it happened and to determine what can be done to prevent it from happening again. The teams investigate adverse events and close calls.

Close calls are events that could have resulted in a patient's accident or injury, but didn't, either by chance or timely intervention.

RCAs are used to focus on improving and redesigning systems and processes—rather than to focus on individual performance, which is seldom the sole reason for an adverse event or close call. A previously unheeded or unnoticed chain of events most often leads to a recurring safety problem, regardless of the personnel involved.

Because people on the frontline are usually in the best position to identify issues and solutions, RCA teams at VA healthcare facilities include a cross section of VA employees. Our teams improve patient safety at their facilities by formulating solutions, testing, implementing and measuring outcomes.

To be truly effective, however, the RCA process must include support by an organization's leadership—this can range from chartering an RCA team, to direct participation on a team, to participation in determining a corrective action plan.

Findings can be shared nationally if there is a clear benefit for multiple facilities. These findings are categorized by NCPS. To ensure that the findings are focused on systems improvement, before dissemination, all personal and facility names, facility locations, and other potentially identifying information have been removed.

NCPS offers RCA training at locations around the nation on a regular basis, and includes interactive exercises. Our training includes an introduction to a software system developed by NCPS, know as SPOT, which supports the RCA process.

We have also developed cognitive aids that we created for use as detailed reference materials for team members and students alike. These "flip books" include *NCPS Triage Cards for Root Cause Analysis* and *Root Cause Analysis Tools*.

Teams use these aids to develop such things as a chronological event flow diagram—to help understand *what* occurred—along with a cause and effect diagram—to understand *why* the event occurred. Chronological event flow diagramming provides each team member with the same initial understanding of *what* occurred, helping to avoid differing interpretations of the same event. Cause and effect diagramming helps teams progress logically from what happened to *why* it happened.

More information is just a click away

The RCA process is described in detail on the NCPS Web site.

Log on to our homepage (*www.patientsafety.gov*) and scroll down to the Root Cause Analysis link.